

## Some notes on *Crateromys heaneyi* Gonzales and Kennedy, 1996 (Rodentia: Muridae) of Panay, Philippines

By R. SCHWEIGERT

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During a field survey on the island of Panay (West Visayas, Philippines) in October and November 1995, some additional results on the biology and distribution of the endemic *Crateromys heaneyi* (Panay cloud runner) were gathered.

The study site is located in the western province of Antique about 6 km east of the town of Culasi in the vicinity of Mt. Madja-as (2 090 m) and includes the areas around the villages Alojipan, Osorio and Flores at an altitude of about 100 m a.s.l. (Fig. 1). A description of the study area is given by GONZALES and KENNEDY (1996).

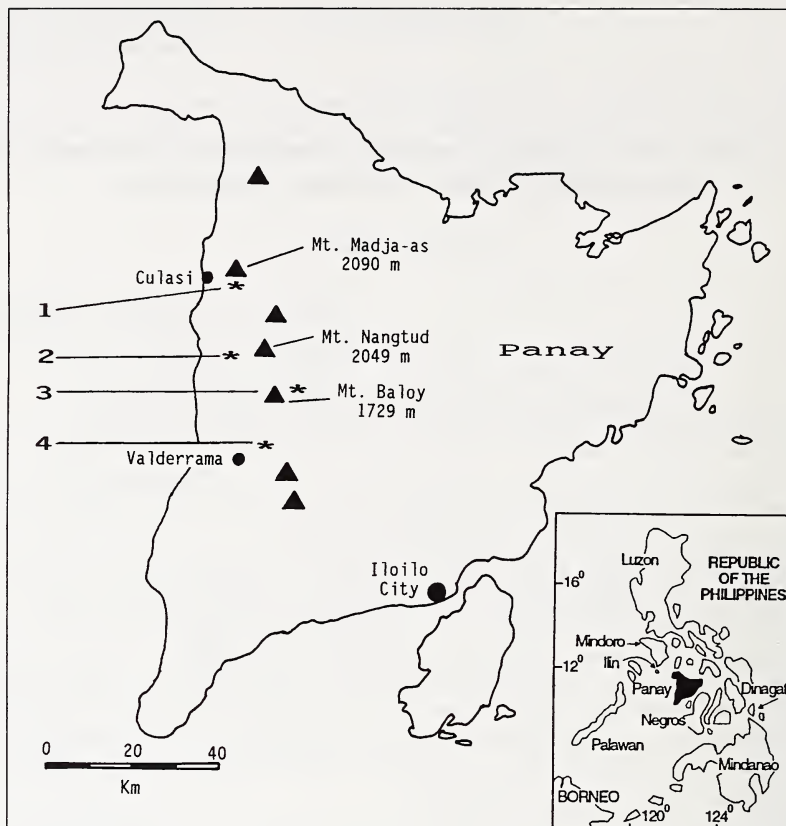
Despite intensive searching only one family (two adults and two young) could be discovered in a tree hole. The author could not make direct observations nor estimations about the abundance of cloud runners. So it must be stressed, that virtually all given informations of this report (e.g. statements about nestconstruction and food plants) were gathered through interviews with local informants.

General descriptions and measurements of two adult *Crateromys heaneyi* males are available. The first specimen was caught during the survey described here in the Lewalew Creek, Baranggay Alojipan in the vicinity of Mt. Madja-as on 5. October 1995 at an altitude of about 100 m a.s.l. (Fig. 1). Head and body length was 25 cm, tail-length 28 cm, and length of hind foot 5.5 cm. Fur color was black, mottled gray in the rear. The nose and plantars were hairless and pink, the ears and eyes were black. The description of a second male from the Hamtang Forest (see below) is as follows (CURIO pers. comm.): Head and body length 35 cm, tail length 34 cm, and weight 970 g. The fur color was black, mantle and face were gray. The belly was gray with a brown stripe. Plantars and nose were hairless and pink. The two individuals exhibit slight color variation as mentioned by GONZALES and KENNEDY (1996). One scout reported, that there is a tendency in the fur of older individuals to become gray.

Den sites of the mainly arboreal cloud runners were found in holes of old trees and inside big tree ferns (Cyatheaceae). But it was also reported to rest in holes in the ground (e.g. between tree roots). Altogether, 19 den sites were found in 11 tree species (plant names after SEIDENSCHWARZ 1994):

*Bischofia javanica* Bl.\*, *Canarium asperum* Bth., *Citrus macrophylla* Wester\*, *Ficus* (3 spp.), *Hydnocarpus heterophylla* Bl., *Lea* sp., *Mangifera indica* L.\*, *Pterospermum diversifolium* Bl., *Ziziphus talanai* Merr.

Three dens comprised of a ball- or dome-shaped "nest bowl" of leaves and twigs built in densely foliated branches of tree species marked with (\*) in the list above. One of these dens measured about 50 cm in diameter and had an entrance of 15 cm at one side. Unfortunately, the three "nest bowls" had already been deserted and started to decompose. All inspected sleeping sites were stuffed with different amounts of dried grass and



**Fig. 1.** Distribution of *Crateromys heaneyi* on Panay, Philippine Islands.

1) Confirmed record in the vicinity of the villages Alojipan, Osorio and Flores (see also GONZALES and KENNEDY 1996); 2) Not confirmed record in the vicinity of Lumbuyan; 3) Confirmed record near Mt. Baloy (Terra typica) (GONZALES and KENNEDY 1996; OLIVER et al. 1993); 4) Confirmed record near Hamtang Forest (CURIO pers. comm.)

shredded leaves of the supporting tree, that should have been collected by the Panay cloud runner.

On most occasions hunters have seen specimens inside their dens in groups of 2 (pairs) to 3 or 4 individuals (pairs with 1 and 2 young, respectively). So it seems possible, that the young of a litter are reared jointly by female and male. Furthermore, it was reported, that families with young have been observed throughout the year.

The diet of the Panay cloud runner seems to be entirely vegetarian and consists of leaves, fruits, seeds, and roots of different plant species. Overall, 6 species of food plants were stated by informants (used parts in parentheses): *Garcinia linearifolia* Elm. (unknown), *Ficus* spec. (fruits), *Ipomea batatas* L. (roots), *Mangifera indica* L. (fruits), *Musa* spec. (fruits), *Psidium guayava* L. (fruits).

According to GONZALES and KENNEDY (1996) *Crateromys heaneyi* is assumed to inhabit the whole Panay mountain range. During this survey the species was reported from the study site (see above) and the vicinity of Lambuyan, about 20 km south of Culasi. CURIO (pers. comm.) reported on a male at the Hamtang Forest by the Sulud Bukidnon of Baranggay Nawili (Bugasong area, Valderrama) at an altitude of about 950 m a.s.l. in the south of the Panay mountain range on 22. March 1996 (Fig. 1).

Local people reported, that cloud runners are common in all locations mentioned were they live in altitudes up to 950 m a.s.l., but the results of this study suggest, that the density of the species is rather low.

Occasionally, specimens of *Crateromys heaneyi* are hunted by native people for food or for the pet market. There are different hunting-techniques. If the slow-moving animals walk on low branches, they are caught with a snare or pushed down with a stick and then seized on the ground. Sometimes, trained dogs are used to track down cloud runners. It was not possible to assess the hunting pressure by people or by feral dogs. But the latter seems to be responsible for the death of many individuals. During this survey, two Panay cloud runners were killed by dogs in a nearby village.

There are only few informations about cloud runners available, e.g. GONZALES and KENNEDY (1996), JONES (1982), MUSSER and GORDON (1981), MUSSER et al. (1985), NOWAK (1991), OLIVER et al. (1993), PASICOLAN (1993), RABOR (1986), and WIRTH (1990). GONZALES and KENNEDY (1996) and PASICOLAN (1993) studied the behaviour of *Crateromys heaneyi* and *Phloeomys pallidus*, respectively, in captivity. A comparison between their results and this study shows obvious similarities in the habits of both species. They are mainly nocturnal, use tree holes as den sites, and feed on vegetable matter. It is unknown whether *Phloeomys* also uses twig nests as does *Crateromys heaneyi*.

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### References

- GONZALES, P. C.; KENNEDY, R. S. (1996): A new species of *Crateromys*: (Rodentia: Muridae) from Panay, Philippines. *J. Mammalogy* **77**, 25–40.
- JONES, M. L. (1982): Longevity of captive mammals. *Zool. Garten* **52**, 113–128.
- MUSSER, G. G.; GORDON, L. K. (1981): A new species of *Crateromys* (Muridae) from the Philippines. *J. Mammalogy* **62**, 513–525.
- MUSSER, G. G.; HEANEY, L. R.; RABOR, D. S. (1985): Philippine rats: a new species of *Crateromys* from Dinagat island. *Am. Mus. Nov.* **2821**, 1–25.
- NOWAK, R. M. (1991): Walker's mammals of the world. Vol. 1. 5. Ed. Baltimore: John Hopkins Univ. Press.
- OLIVER, W. L. R.; COX, C. R.; GONZALES, P. C.; HEANEY, L. R. (1993): Cloud rats in the Philippines – preliminary report on distribution and status. *Oryx* **27**, 41–48.
- PASICOLAN, S. A. (1993): Biology of Northern Luzon slender-tailed cloud rat (*Phloeomys pallidus*) in captivity. *Asia Life Sci.* **2**, 223–226.
- RABOR, D. S. (1986) : Guide to the philippine flora and fauna. Vol. 11: Birds and mammals. Natural Resources Management Center: Ministry of Natural Resources and University of the Philippines.
- SEIDENSCHWARZ, F. (1994): Plant world of the Philippines. An illustrated dictionary of Visayan plant names with their scientific, Tagalog and English equivalents. Cebu City: Univ. San Carlos.
- WIRTH, R. (1990): Borkenratten – die Philippinischen Riesennager. *Mitt. Zool. Ges. Arten und Populationsschutz* **6**, 1–2.

**Author's address:** RAINER SCHWEIGERT, Hardenbergstr. 27, D-24118 Kiel